Mid - Florida Atari Computer Club Bulletin

March, 1995

Vol. 12, No. 3

This is the monthly bulletin of the Mid-Florida Atari Computer Club. In it are articles written or submitted by members who feel they are of interest to all users of Atari computers.

You may wish to join a computer club to share the beneficial aspects of having others around you who have similar machines, like interests, and a desire to share what they know with others. A users group can help you understand things about your computer that they have already discovered.

Our membership, at $12.00 per year, entitles you to the newsletter, access to the disk libraries, and club meetings where all the fun and education happen on a monthly basis.

We meet in the Orlando Library building downtown Orlando, 101 E Central Blvd. At 1:30PM on the second Sunday of each month. Feel free to join us there next month to learn more about the wonderful world of computers, and Atari computers in particular.

For Newsletter Exchange

M.F.A.C.C.
C/O Bob Smith
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Orlando, FL 32818

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Mid-Florida Atari Computer Club

From the President

This month the tone of my message is very different from my normal type of missive. As president, I have the unfortunate and very distressing job of informing our membership of some very disturbing news.

As you all know our Club is a nonprofit social entity that charges it's members an annual membership dues to provide the necessary materials and equipment for it's members. We on the Board have tried do the utmost for the Club in the performance of our duties and have never done anything that would endanger our fine Club. In as much as the Club is not really a corporation or formally chartered Non Profit group, it has never occurred to the present Board or past Boards for that matter, that Taxes were to be paid to both the Federal Government and the State of Florida. We have now been informed by the IRS and coincidentally by the State of Florida that we are very in arrears for Income Taxes, tangible property taxes and sales taxes that are owed. The total of these figures amounts to something over $10,000. with interest and penalties. Unknown to most of the membership there has been an ongoing Federal investigation of our Club by the IRS and a State investigation by the Florida Department Of Revenue. The results of these investigations will probably result in Federal and State criminal prosecutions of the current and past Board members, dating back to 1986. We have been threatened and bullied into some addmissions which are not true, in spite of what you will hear. It does appear that our Club will have to cease complete opperations this month as all of our equipment will be confiscated for part payment of the previous taxes owed. In addition, our membership list has been subpoenaed by the various agencies involved and it is quite possible that some, if not all of our members, past and present will be called upon to give some sort of depositions.

I can only say here that what we have done in the past and present will be the subject for discussions of scholars in the future. Inasmuch as this is probably the last time that I will be writing this column, I just want to say it's been fun and I shall never forget you. Thanks for the memories.

I will take any kind of donation in advance. Stripes, especially black and white ones does not look very good on me and leg irons are not my idea of the latest punk jewelry.

Now on to a little less controversial subject, namely our elections. This month is the time when we select a nominations committee to nominate our Board Members for the coming year. In the month of April, the nominations committee should have a slate to present to the membership and at the same time, nominations are accepted fromt the floor. The offices involved are the President, Vice President, Secretary and Treasurer. WITHOUT your input and nominations, this process DOES NOT work, so get involved. One more thing, in order to vote in June, 1995 for your favorites, you must renew your membership either at the June Meeting or prior. Only paidup and current members can vote. Don't wait for the rush, renew early as the Renewal dues are still only $12.00 per year. To renew early, just see our Treasurer, Bill (Money Bags) Baker, at the April or May meetings and he will be happy and eager to take care of you. For our newer members Gail Kindstrom, part of our illustrious Newsletter Staff, is the gentleman that was awarded the Club Bike for Daytona Bike week, last year. This year, he has a very special person visiting with him from up north and as is the custom he once again is in the Bike Week race and you might ask him about how he made out in the race and in what place he ended up.

More from our president on page 5!

Minutes Of The M.F.A.C.C. General Meeting

MFACC BUSINESS MEETING

The February meeting was a low key meeting to say the least. There was no business meeting due to the fact NO officers were able to attend. Bill Baker the treasurer came late after having car trouble on the way to the meeting.

Bob Smith the President was not in town, but claims he was delayed at an airport by custom agents because he sounded like he was talking a foreign language. After finding out he was from Texas the speech problem made complete sense.

Robert Raymond had prior commitment to play with a train.

John Baker is any bodies guess!!

Some phone numbers you will need to communicate with our club:

President:
Bob Smith ☛ 299-5374

Vice-President:
John Baker ☛ 823-9705

Treasurer:
Bill Baker ☛ 277-3438

Secretary:
Robert Raymond ☛ 896-7404

Librarians:
8-Bit:
Jeff Potter

ST:
Bob Smith ☛ 299-5374

Publicity:
☛

This newsletter is produced on an Atari Mega STE-4, using Pagestream 2.2 and printed on a Hewlett Packard Deskjet 500

Treasurer's Report
February, 1995

Opening balance of	619.82
Deposit	12.00
Debit	00.00
Service Charge	10.00
Closing balance	621.82

Birthdays for March

James Roark
Chet Fromm

All welcomed as new members.

COMING EVENTS

April 95: Nominations ~ Hardware Demo by Bob Smith ~ 8-bit Software Demo Jeff Potter ~ Return of Robert Raymond ~ Renewals taken
May 95: Nominations Published ~ Renewals
June 95: ONLY paid members vote in Elections
Possible outside presentation.

FOR SALE!

3 single density drives complete $10 each
Large selection of new & used software, games utilities etc. Start mags with disks $1 each.
SM124 St monochrome monitor $75
Hard drive boxes & power supplies $50@
See Bob Smith or call 299-5374

Next month, there will be a very special Hardware Demo that will be taped and saved for future use. I will be demonstrating on how to (horrors) clean your disk drive. This will be for both the 8 Bit and ST users and as a special added attraction, I will demonstrate the proper procedures for removing the screws from the case. Seriously, this can save you downtime and headaches. Be sure to attend our April Meeting for this demo.

Thanks in advance for your cooperation and see you at the meeting.

(This was a test to see who reads the President's Message.)

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ORLANDO, FLORIDA

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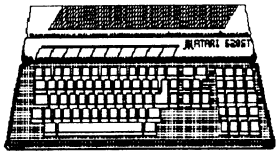

The Falcon has LANDED!!!

STZip version 2.6

(c) Vincent Pomey 1990-1994
By Bob Smith

I have been asked quite a few time about ZIP compressed files and have tried to explain how the compression program works. In this respect, I have been less than successful, however, the following is an extremely good explanation of this program and more specifically, how to use this latest version. With ZIP becoming the comprehension program of choice, it will behoove the reader to learn the many advantages of this specific program. You will find this program is shareware and available from many sources, such as your Club Library, Bulletin Boards, commercial pay services (Genie, Compuserve, etc.) and from friends. Please let me know if you need any additional information.

****
* 0 - Prolog *
****

STZip is a program that allows you to compress and decompress files, i.e. to reduce their lengths. You saves space on your disks and reduce the transmission time if you send the files by modem. It also allows you to group several files in one single file, whose extension in general is ZIP.

STZip uses files that are compatible with PKZip 2.04 on the IBM PC, and the Unix Info-Zip programs Zip 1.9/Unzip 5.0.

You may copy this program and put it for download on bulletin boards. Commercial use and distribution (that includes putting STZip or self extracting files made by STZip on anything that is sold for more than the cost of the disk and handling charges) is not authorized without agreement of the author. You use this program at your own risk, there is no warranty. Please avoid to "repackage" STZip, I prefer than the users gets all the files originally in the distribution. This is postcardware : if you use it, please register by sending a postcard to

Vincent Pomey
2 allée Valéry Larbaud
92260 Fontenay aux roses - France

I inform registered users of new versions if they supply an E-mail address. Thanks to all users who were kind enough to register !

The program is written in Modula-2 and assembler. For information on the file format, see the APPNOTE.TXT file distributed with PKZip from PKWARE. It explains the directory structure of a ZIP file, and the decompression algorithm.

I can be reached via electronic mail :
Fido : Vincent Pomey (2:324/101.10)
Email : vincent@stell.frmug.fr.net(please do not send large mails)

As you will probably see if you read this doc, I'm not a good technical writer... Sorry for that !

----oooOooo---

There are several ways to use STZip:

- double-clicking STZIP.PRG, using the GEM-interface

- installing it as an application in the desktop: click once on STZIP.PRG, choose from the Desktop's menus the entry "Install Application," type ZIP and confirm. After this, you may save the desktop. Now, to use ZIP you only have to double-click a file with the extension .ZIP and you will find yourself in STZip, with GEM interface for using that file.

- renaming STZIP.PRG to STZIP.TTP and using it (or ZIPJR.TTP) with a command line.

- from a command line interpreter or external program, also using a command line.

- with some desktops, it is possible to drag and drop a file to the STZip icon. If this is a zipfile, it will be opened. If not, a zipfile with a similar name (e.g. FLAP.ZIP if you dropped FLAP.PRG) will be opened.

The usage with the GEM interface is the easiest. Certain options are available only in GEM (the comments for example), while others are only present with command-line usage (e.g. excluding files from compression).

ZIPJR.TTP is a stripped down version of STZIP : it does not have code for the GEM interface, but features are exactly the same if you're using the command line interface. The only advantage is that it is smaller.

****
* I - Usage with a command line *
****

The usage of STZip with a command line is similar to that of ARC or LHArc on the Atari, or PKZip on the PC.

1 - A Table

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The syntax is of the form:

STZip command {options} [path] zipfile {file}

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There has to be one single command:

-a add files
-d delete files
-f freshen: update files in the zip-file
-u update: add new files and freshen the ones already present in the zip-file
-x extract files
-s extract compressed files on the screen
-c check the zipfile
-v list of the files with info
-l list of the files, just with their names
-? a bit of help

You can also add a few options:

-o overwrite a file without asking for confirmation if the file already exists
-r 'recursive compression: all the files in the sub-directories you selected will also be compressed.
'recursive decompression: files compressed from sub-directories will be decompressed in the corresponding folders, which will be created if they don't exist.
-p store pathname: the pathname of the file you have specified in the command line is stored in the zip; automatic with recursive compression

-m move file: files are deleted after compression

-t the date of the .zip file will be that of the file compressed with the most recent date.

-z modify the general comment for the zip file

-i dir put the files to be compressed in the subdirectory DIR in the zipfile
-b dir use dir when writing tempo files
-g extract the file .ZIP in the directory
-w pw encrypt the files to be added using pw as password or use pw to decrypt the files to be extracted
-nmmddyy add only the files newer than mm/dd/yy (US date format)
-h wait for keypress before terminating the program

-k filenames are case insensitive when using MiNT

-q quiet - suppress all output
-e specifies the compression method:
-es store, no compression
-eh shrink, quick compression
-ei implode, default
-ed deflate, better compression

Note that you can use the -z option alone, without any command. STZip will only ask you for the new comment of the file.

The -k option is only useful if you use MiNT. Filenames are case-insensitive if you don't use MiNT.

2 - The command line

You can specify the folder that is to be used as a default for all operations after the commands and the options: for example d:\texts\. Note the \ at the end.

Following that, the name of the zipfile, that will contain (or already contains) compressed files, must be specified. The extension .ZIP is the default. You may use wildcards for the zipfile (but be sure that your shell doesn't expand them because it won't work) : all the matching zipfiles will be processed . e.g. stzip -xg *.zip this will extract all the zip files in their directory or stzip -z *.zip <comment.txt this will change the zip comments for all the zipfiles. (note that -z may now be used alone, without any action switch).

After all this, you put the list of files to be processed (i.e.: to be deleted, compressed or decompressed). It may be a directory name (without trailing \), all files inside that directory will be processed.

You may use the wildcards ? and * in the names of files:
? represents any single character
* represents a string of characters

Not specifying any file names is the same as *.* (all files).

3 - External list

If a name begins with a @, it means that that file contains a list of files to be treated. If you have a file list.txt containing for example:

*.mod
zip*.txt
file1.vdt

then stzip -a burp @list.txt is equivalent to
stzip -a burp *.mod zip*.txt file1.vdt

stzip -a burp @ will read the names of the file from stdin (generally keyboard).

4 - Excluding files

If a name begins with a ~, it means that it is NOT to be added. It is solely of interest when one uses wildcards; for example, to compress all files except .BAK, you have to use something like this: stzip -a burp *.* ~*.bak

5 - Odds & Ends

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An external list may contains another external list, but not ~file names. The ~ file names of the command line are valid for all files, including the ones read from external lists.

Matching wildcards goes MS-DOS style, not the Unix way: *.* matches all files, and not only those that have a . in their name. Paths using '..' are not supported.

The -p switch:
If you run stzip -ap burp folder\alt.txt, the name of the file in the zip will be folder\alt.txt, while without the -p switch, it would have been alt.txt. The -p switch is automatically invoked during recursive compression.

The -b switch:
When updating a zipfile, STZip writes a temporary copy of that zipfile named __TMP__.ZIP, works on it and then renames it to the original zipfile. This tempo file is located on the same directory than the original zip. However, you may want to change that if you're working on a nearly full partition or on a floppy. Use the -b switch to change the directory for tempo files. Note however that seting tempo files to a partition different of the one of the zipfile introduce delay (file copy is slower than renaming). This is why environment variables likes TMP or TMPDIR are ignored.

You can set frequently used options in command lines in an environnement variable named STZIP_OPT. STZip will simply add that variable at the beginning of the command line. e.g. setenv STZIP_OPT -k so that STZip will always be in case insensitive mode.

Using STZip with the command line interface, long filenames available with alternate filesystems (MiNT feature) are supported, as well as case sensitive names.

A little trick : suppose you're in directory C:\, want to create a zipfile C:\BURP.ZIP contained C:\FILES \DEMO*.TXT, but stored as DEMO *.TXT in the zipfile. Use the path feature : stzip -a burp.zip c:\files\ demo*.txt

6 - Recursive compression

If you have entered the -r option for compression, an important thing will happen: the files you specify will also be searched for in all sub-directories below you.

The second attempt at explaining will be based on examples, the first one being incomprehensible without several hours of meditation topped off with a bunch of aspirins.

An important thing to note is that if STZip doesn't do want you want, either compression or extraction, that's probably because you have forgotten to add the -r switch.

(In order to better understand the second attempt, remember that folders do not actually exist within a zip-file. It's the path of the files (stored in the .zip) that contains the names of the folders)

fld is a folder.
...\ stands for any quantity of folders, or even none.

* stzip -ar burp
All the files in the current folder will be compressed, including sub-directories.

* stzip -ar burp fld
The files fld\...*.* will be compressed. The name fld\...*.* is stored in the zip file. To recap: all the files in fld are compressed, including all the subdirectories found in fld.

* stzip -ar burp fld*.txt
The files fld\...*.txt will be compressed. The names fld\...*.txt are stored in the zip file. To recap: all the files with the extension txt in fld are compressed, including all those found in the subdirectories found in fld.

* stzip -ar burp fld\file.txt
The files fld\...\file.txt will be compressed. The names fld\...\file.txt are stored in the zip file. To recap: all the files with the name file.txt in fld are compressed, including all those found in the subdirectories found in fld.

* stzip -ar burp c:\fld
The files c:\fld\...*.* will be compressed. The names \...*.* are stored in the zip file. This means that c:\fld\ will NOT be stored as part of the file names of the compressed files, because it is a COMPLETE path, different from fld\.
Also, by using the changing of the working directory (of the kind stzip -ar burp c:\fld1\ fld2*.txt) it is possible to perform all sorts of complex manipulations with the names of the files to be compressed. In the above example, the files with the extension txt in c:\fld1\fld2 will be compressed, but their names in the zip-file will be fld2*.txt.

No tests are performed EVER on the names of folders. stzip -ar burp *.txt will search in all directories, not only in those with the extension txt!

Some Unix-style shells perform themselves the substitutions of the wildcards. STZip does not respond similarly to 'stzip -ar burp fld\a.txt fld\b.txt' and 'stzip -ar burp fld*.txt' even though for the shell this may be the same. In this case, it is therefore necessary to add quotation marks to fld*.txt so that the shell will not substitute the wildcards. Likewise, the ~ character may pose problems.

7 - Recursive decompression

If a zip file contains folders, there are two possibilities:
- ignore them and decompress to the current working directory (which is the default). This allows for the quick decompression of a specific file without creating lots of folders.
- or decompress the files to these folders and create the folders when necessary. For this, use option -r.

You can always add paths and use wildcards in the filenames. If you specify in the parameters a name with a

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path, for example infra*.msg, then all *.msg files in infra AND in its subdirectories will be extracted.

8 - Comments

The global comment for the entire zip file (changed with the -z switch) is displayed every time the zipfile is accessed. In Gem, it is also possible to have a comment for each files in the zipfile, it is displayed when the file is extracted.

********** * II - Using the GEM interface * **********

1 - General

If you started STZip normally from Gem (without parameters, droping or double-clicking on a zip file), STZip will show you a file selector, asking for a zipfile. You can select an existing one (for extraction or update) or a new one, STZip will create it. If you just type Return, STZip will open DEFAULT.ZIP (or create it if it doesn't exist).

The general algorithm is to select files on the disk selector and then click on the "Compress" button if you want to compress files, and select files on the zipfile selector and then click on the "Extract" button if you want to extract files.

If you click on the "Compress" or "Extract" button without having selected any files, STZip will suggest you to process all the files.

You may unselect all the files by clicking on the "Select: 000" button (it shows the number of selected files).

Some text shows you at the botton of the window the size of all selected files in the zip or disk selector. You can swap from zip selected size to disk selected size by clicking on that text.

To change the zipfile, click on the close-box of the Zip file selector.

The "Recurse Subdirs" button: during compression, if it is selected, then all subdirectories will also be compressed. During decompression, if it is selected, then all files will be extracted to their original directory : DIR\FILE.TXT will be extracted in directory DIR (created if it doesn't exist). If not selected, DIR\FILE.TXT will be extracted as FILE.TXT, in the current directory.

2 - Informations/Comments

To get information about the entire zip file, you have to double-click on name of the zip file.

Similarly, you may get information about a specific file in the zip or on the disk by double-clicking on its name.

Information about the zipfile and the compression files contains some comments, and you may edit them. Zipfile comments are displayed whenever accessing the zipfile, while comments specific to a compressed file is displayed when extracting this file. The comments are saved on disk when you change the zipfile or when you quit STZip. This results in some disk access.

While looking the information of a disk file, you may rename it.

In the zipfile contents box, a point just before the file name means that there is a comment attached to that file.

3 - File display

While looking the information of a file (compressed or on disk), you will be able to Display it (by clicking on the Trash button, uhh no, the Display button). A new window will appear. Then, a few keys are available :

arrow keys : Move the text
Clr-Home : Goto beginning of the file
Shift-Clr-Home : Goto end of the file
Ctrl-V : Copy the file to the clipboard
Ctrl-S : Save the file (will ask for filename)
Ctrl-C : Change the font or the font-size used
Ctrl-F : Search a string
Ctrl-G : Search same string
Ctrl-P : Print file
Ctrl-R : Print block
Ctrl-B : Save block (will ask for filename)
Ctrl-W : Copy the block to the clipboard
ESC : Quit the display mode

It is also possible to get a menus with those options by pressing the HELP key or by double-clicking in the window.

The block is selected by using the mouse : clicking on the first button sets the beginning of the block, clicking on the second button sets the end of the block. The block is displayed in bold fonts.

Picture Display :
STZip will call a picture viewer that support the image format is one is found.

4 - Configuration

The Configuration dialog box lets you choose the compression method, the sort method for the Zip selector and the Disk selector.

The configuration file STZIP.CFG contains all those choice, plus the current disk path and list field (the mask for the compressed files to be listed), as well as the Font

continued next page

ID, Font Size and Tab Size used while displaying files. It is saved in the home directory of STZip.

On later call, STZip will go in the directory where you were when you saved the configuration. That way it will always start listing the files of the same directory. Since you may not like that, an option disable this and STZip stays in the current directory ("Go in current dir rather than saved dir").

Note that the configuration file is used _only_ when using the GEM interface. It is not read when STZip is called with a command line.

On TOS < 1.4, the configuration file will be loaded and saved in the current directory. This is not very clever but it is because the shell_find function doesn't work on old TOS.

On newer TOS, the configuration file -if it exists- will be loaded from the directory where STZIP.PRG is, and be written at the same place. But if there is no configuration file there when you start STZip, it will be saved in the current directory. That's why there is a dummy configuration file in the distribution archive : if you put it with STZIP.PRG, the configuration file will be always written in the directory where STZIP.PRG is.

The tempo directory is where STZip writes the backup of the zipfile he is currently updating. If none specified, it is the directory where the zipfile is. See detailed explanations in section I-5 "-b switch".

5 - Odds & Ends

It is possible to create a subdir in the zipfile or on the disk. The program will ask you what you want when you click on "Create Subdir". Note that a subdir in a zipfile only exists if you put files in it. If you do not compress anything in it, the created subdir will not appear in the zipfile.

********** * III - Third part of the doc **********

1 - Compression method

The best compression method is _deflating_. It is quite recent, but is now available in PKZIP 2.04 and upper on PC, and in Zip 1.9/Unzip 5.0 on Unix (and Amigas etc).

The deflating method has three variants : one that compress faster but not so good, one medium, and one which compress best but slowly. There are buttons to select the one you want in Gem (Config dialog box). Using a command line, -edf gives you the fast one, -edb the best one, and -ed the medium.

The default compression method is the medium deflating.

Shrinking is an very fast compression method, but not as good as deflating or imploding. _Storing_ simply stores the files without compression. You may use that if the files are uncompressible (already compressed files or compressed pictures such as GIF or JPEG files).

Imploding is an old compression method, now considered as obsolete since deflating is better. You may still use it if you want that your files may be extracted using old versions of STZip.

STZip checks if the file to be compressed has been already compressed using ARC, LHARC, ZIP, ZOO, freeze, compress, PfxPack, Ice or Atom. That way, you won't loose time or space trying to compress files that would give bad or no compression at all (not speaking of growing in size, which is possible with the Implode method).

2 - Updating and freshening

These options allows to add a file you specified (in the command line) or selected (in Gem) only if it is needed :

-Freshening : only specified files that are already in the zip and are newer than those in the zip will be added.

-Updating : only specified files that are already in the zip and are newer than those in the zip, _AND_ the specified files that are not in the zipfile will be added.

-Using a date line : only the files changed after the specified date will be added.

To use those features in Gem, click on the 'Add Mode' box, and select what you want.

To use those features in a command line,
freshening is -f : stzip -f backup *.c
updating is -u : stzip -u galery *.gif
date line is -t : stzip -a -t011692 fip *.prg
Will add all *.prg files created or changed after Janury 16th 1992.
Note the US date format !

3 - Self extracting files

You may use ZIP2TOS.PRG to convert a zip file to a .TOS program which will contains the compressed files and will extract them when launched.

Without parameters, you will be prompted for the file to convert. You may also calls it with the zipfile names in parameters, from the desktop (drag a file) or a shell (zip2tos *.zip)

A self extracting file should contains _only_ deflating or stored files. It will be unable to explode or unshrink files. This is _not_ checked when ZIP2TOS does the conversion.

A self extracting file may be used as a normal zip file.

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Using STZip >1.3, you will be able to change the comments, list, extract, add or delete compressed files in the self extracting file.

When creating a self extracting file, you may choose if the self extracting file will overwrite files during extraction without asking. Answer Yes to the question in Gem, or use the -o switch in command line if you want that.

4 - Encryption

A compressed file inside a zip may be crypted. STZip use the same algorithm as PKZIP, and also support the slighly different method used in the Unix versions of Zip/Unzip.

You may specify a password using the -w switch when using the command line interface, or by clicking in the "Crypt box" in the Gem interface. The files to be compressed will be encrypted using that password.

That password will be also used when extracting files. If you forgot to specify it and STZip encounter a crypted file, it will prompt you. (i.e. : if you compress files using password BURP and extract them without leaving STZip, STZip won't prompt you for the password since it still has BURP in mind).

STZip is also able to tell you if the password supplied for extracting a file is wrong. Note that the password is not stored in the file (would be stupid!), STZip uses some techniques to see if the beginning of the file extracts correctly with the supplied password.

5 - Return codes from command line mode

1 : not enough memory
2 : file not found
3 : illegal option
4 : two actions specified
5 : no zip file specified
6 : no command specified
7 : error reading
8 : this file is not a zip file
9 : error writing
11 : warning during extraction (read/write error, CRC error ...)
12 : warning during compression
13 : error while copying tempo zip file to original zip (file __TMP__.ZIP may however be a correct zipfile)
00 : Function not implemented

6 - Limitations

The number of files in a zip is maximum 65536.

7 - The End

Thanks to H. Okumura for his help with the 'sliding dictionary' compression and to Philippe Regnauld for the STZIP logo in GEM.

Have fun using it !

Vincent Pomey, 28 April 1990, 13 April 1991.
Translation by Peter Kocourek, 25 July 1991.
Updated, 27 December 1992, 13 Febrary 1993, 30 April 1993,
2 April 1994

"From a saved backup...."

By: Ron Whittam

In this column I hope to foster communication and support for 8-bit and ST computer owners... presenting a positive and directive approach. This will help to strengthen the users group base and encourage the executive element.

If you have a question you would like me to answer, or a topic you would like to see covered; send me an Email!

//// The Information Super...

Seems everyone nowadays is interested in getting "on line" with the Internet. In our niche of electronic media, everyone we talk to is involved with Internet activity. However, even with the all the media hype, to a huge amount of the populas it is nothing more than technical jargon. Internet, Infomation Superhighway, SLIP, PPP, Shell Account, TCP/IP, UUCP, EMail, etc., are words and letters that have no conceptual meaning. When a friend of mine introduced me to his son the other day, his son asked what I did for a living. I told him I worked with EMail systems. He smiled and said, "Oh, that's cool." His father prompted his 20 year old son who finally admitted he didn't know what "EMail" really was. I think I often fall into the trap of tunnel vision. Not everyone sees the humor in my sweatshirt that proclaims, "I got run over on the Information Superhighway." The tire treads cause some strange looks and double takes, though.

//// The Right Tools

Connecting your computer to the other computers networked across the world is not a simple task. Depending on your particular needs, you must choose the right tool to do the job. The cost of connecting is rapidly dropping. The variety of connection services is increasing. And as you choose your connections you need to be careful to get what you really want.

//// Getting Connected

There are primarily four methods of getting connected to the Internet. The first two methods (direct Internet Protocol (IP) connection) could be via a leased line using a router or a dial up using a modem. The direct connection uses TCP/IP. TCP/IP is a common name of a collection of 100's of protocols that are used to connect computers and networks. TCP/IP stands for Transmission Control Program/Internet Protocol. These protocols include Electronic Mail (Email), Remote login to connect to and use another computer, File Transfer Protocol (FTP), ARCHIE to search anonymous FTP archives, Menu-based information called GOPHER, Gopher menu searchers called VERONICA and JUGHEAD, WIAS Servers to search indexed databases, and the World Wide Web (WWW), as well as many others. Connecting to the Internet via a modem will require TCP/IP programs to be ran on the home computer as well as a protocol called SLIP or PPP. SLIP is a Serial Line Internet Protocol that virtually ignores errors. PPP is a Point to Point Protocol that is similar to SLIP but more robust. SLIP is fine for home use.

The other two methods were born out of UNIX, a major operating system that runs most of the Internet networks. A large number of computers move files (and electronic mail) via a mechanism called Unix-to-Unix CoPy or UUCP for short. This allows a remote computer to connect to a host computer and transfer messages with UUCP programs. To use this method, you would need a UUCP program running on your home computer and a modem to dial an Internet Provider offering UUCP Email and News Feed access. This method allows for the least amount of online time and provides you with an Internet address so people can send you Electronic mail. There are a few of these types of programs for the Atari (In GEnie's Atari ST Libraries, there is a program called MERCURY that will do this very nicely). The last method is called a Shell Account. Your home computer needs only a VT100 Terminal emulation program and a modem. You dial into a computer and run the Internet software on that computer. You have access to all the tools but nothing is running on your home computer. After transfering files from a computer on the Interent, you will need to download them using Zmodem (or another protocol) to get them to your home

computer. It's easy and simple, but it is text based and you need to know a bit of the UNIX operating system to use it.

The most productive element (and the least glamorous) of the Internet is sending and receiving messages, called Electronic Mail (Email). All of the methods (stated above) can do this. Email can be transfered from computer to computer using TCP/IP or UUCP methods. Nearly 80 countries in the world are connected to the Internet with Graphic capabilities, 150 countries are connected with Email capability. Primarily Email is a person to person method of communication. However, you can reach a lot of people of your similar interests by subscribing to List Servers. List Servers are computers that keep mail lists of people on the interent with similar interests. To get on a list you have to subscribe. To get taken off, you unsubscribe. Subscribing is easy. First you need to know the List Server's administration name and the mail list name. You then send a message to the List Server's administration address with the information in your message that has the word SUBSCRIBE, the mail list, and your name. Soon, you will be getting messages from everyone that sends a message to the mail list name.

//// Gateways

The UUCP Email and News Feed method is a gateway. You do all your message work on your home computer, while connected. Then you briefly connect to move the messages back and forth. Some services offer Gateways to the Internet; providing Email messages but not all the glitter and glamour of the other Internet tools. CompuServe, AOL, GEnie, and other services, as well as corporations, have long used this Gateway method. The current trend of these services is to provide real "on the 'net" access to the Internet. These services are offering the same services offered by local Internet providers. However, they also offer products and services that you can't get by being on the Internet. As you research your needs, keep this in mind. Often these services offer free access temporarily. This way you can check out what they offer, without costing you more then you are willing to pay.

//// Getting Access

Getting access is easy. Getting the right access for your needs might be a little tricky. Learn all you can. If you are only interested in Electronic Mail messages to and from people on the Internet, then the less expensive options might be for you. GEnie Services offers simple EMail to the Internet with its normal offering. For $8.95 a month you can have 4 hours of connect time. This is a lot of time for just EMail. Atari owners can use a program called Aladdin to create, read, and reply to message while offline, and then spend just few minutes each day loging on and uploading those messages. Other services offer similar Email methods. You may want to explore other features these services offer, including message boards and file archives; as well as expanded Internet services. Other Internet Providers offer UUCP connections that are very cost effective for Email. Atari programs like MERCURY will help you easily get your messages to from these services.

For more advanced features, Demon Internet Software might be for you. The developer, Demon Internet located in London, provides a software kit that consists of TCP/IP software KA9Q, email software, Usenet readers, finger, Telnet, and FTP programs. This software is available in the US on major information services and on the Internet. There is not, as yet, a graphical Web browser for the Atari ST. However, the text based LYNX will work fine. LYNX is a text-only browser and cannot display graphics. When a graphic based browser is available, you will have all the access you need. The Internet is a growing interest, and rest assured that Atari developers will be creating some pretty nifty Internet programs.

//// Web Feet

The current trend is toward graphical tools and away from the command line text based tools that made the Internet what it is. Methods of transfering files and locating information have been incorporated into a graphical hypertext environment making the traversing of the Internet nearly transparent to the end user. The File Transfer Protocol (FTP) and Telnet (running programs on another computer from your home computer) as well as new tools called by acronyms such as GOPHER, ARCHIE, and

VERONICA have all been incorporated into what is being called "the Web" or the World Wide Web (WWW). WWW is an uncomplicated method of accessing information and moving files on the Internet.

Web-browsers are programs that can use files, called "home pages," created with a concept called hypertext. Hypertext is a document that is linked to other documents or forms of information. These other forms of information could be sound, picture, or motion video. Hypertext uses codes associated with the words or pictures to refer you to other pieces of information. This is similar to the cross-referencing in an encyclopedia. But instead of turning pages, you can use your mouse pointer and click on the object or word and the browser will bring that new document to the screen. In order to do this, it may connect to another computer or do a file transfer. All this is done behind the sceens while you wait.

Web-browsers are getting the attention of the media and is the current advertizing hype to get paid customers connected to Internet access providers. Check any magazine (or your mailbox); the major Information providers are asking you to get online to use their product's Web-browsers. Many claim that access is at the cost of most cable service prices. In short, Web-Browsing is entertainment. It is still too young to be a useful tool for productivity... but just wait a month or two.

The sad fact is that the Graphical tools are not being advertized on the Atari platform. Most require MS Windows, UNIX X-Windows, or a MAC machine. However, while pictures, sound, and motion video have not made it to the Atari, the Web-browsers have. Text-based (no hypermedia) Web-browser, LYNX can be used in the Atari realm. In fact, there is an Atari WWW home page. I have seen it. No pictures, but you can access the hypertext codes with the click of the mouse to navigate across the Internet. WWW pages can be used by both text and Graphical browsers.

Here are some addresses for Atari WWWeb home pages:

Atari CD FAQ: http://www.dl.ac.uk/ MISC/ ATARI/CD_FAQ Atari FTP List:http: //www.dl.ac.uk MISC/ATARI /ftplist.txt Atari Connectivity Guide: http://www.dl.ac.uk/MISC/ATARI/SLIP_FAQ Atari TOS Desktop: http://www.dl.ac.uk/MISC/ATARI/servival Mark Smith's Atari page: http://www.dl.ac.uk/MISC/ATARI/atari.html

Here are some EMail address to send letters to:

COMPO Software: compo@cix.computlink.co.uk Demon Internet: internet@demon.com Gribnif: gribnif@genie.geis.com HiSoft: hisoft@cix.compulink.co.uk ICD: icdinc@genie.geis.com The staff of AEO: aeo$@genie.geis.com Sam Tramiel: 75300.3443@compuserve.com

Here are some sites to copy files from, with FTP:

FTP: atari.archive.umich.edu/atari/ FTP: ftp.demon.co.uk/atari FTP: micros.hensa.ac.uk/micros/atari/ FTP: src.doc.ic.ac.uk/packages/atari/umich/ FTP: wuarchive.wustl.edu/systems/atari/

//// Where to Find More Info

There are countless books on the subject of the Internet. Drop into any bookstore or software retail outlet. Also check out most any computer magazine and you will find articles on the Internet. Here are a few good books:

The Internet Complete Reference The Internet Yellow Pages Internet for Dummies More Internet for Dummies The Idiots Guide to the Internet The Internet Companion ...and others.

Internet World Magazine NetGuide Magazine

//// Where to Get Connected

In a word, anywhere. The Internet Complete Reference lists 128 Internet providers in its Appendix A. WOW. In just the last six months Boise, Idaho has added two local providers to that list. PrimeNet and Micron Internet Services.

//// Here's the Shrink-Wrap

Learn all you can about this emerging technology. Find out who your local Internet providers are. Get the software you need for your Atari, and begin to use the Internet for productivity and entertainment.

Until next time....

Ron Whittam is a Customer Support Specialist for a small software firm in Boise, Idaho; and the President of the Atari Boise Users Group. He can be contacted on GEnie (EXPLORER.4), on the Internet at <explorer.4@genie.geis.com>, or on ApC BBS (208-362-1790).

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KEY ISSUES

"Another light goes out"

by Robert Raymond

You've heard this a thousand times before: I got my first Atari in1978, I've owned two 800, an ST, and a Jaguar. But now, I have to bow to the forces of technology, and buy a PC.

The usual reasons. I was at my brothers house, and I got a chanceto play Dawn Patrol, that screamer new World War One simulator that is so realistic, you can feel the wind as you cut in behind anotherFokker. I was on a biztrip with my boss and, after grilling me about owning 'a toy', he mentioned upcoming projects that I could become leadprogrammer on if I could get some stick-time on some version of C++. I've looked through the glass at Babbages in the mall like a waif looking through the glass of an eatery. Like everyone else, I've taken about a decade of crap from everyone, watched more and more titles go over to the PC's, and gotten tired of sitting on the sidelines, rooting for a company who couldn't give a damn.

Let's face it. Atari is a Japanese name, and it fits with those occasional stragglers that refuse to believe that the was has been over for over four or five decades. Which is really sad since I still consider the ST a great machine (probably one of the best machines for the home market ever produced). Which is the same as mentioning that Eastern had lots of good planes and pilots, right before the corporate raiders screwed them.

So what does one do with a sixteen bit computer with 44megs, now that the new computer will run a 90Hz, have 8meg on board, and 540meg in the drives?

Selling it is out - I can still play Civilization, Railroad Tycoon, and Pirates (not to mention some of my own home-made games), which makes it worth more to me that the paultry $100 that I would be lucky to get for it on the market. And since I run operations on my model railroad, I can use as a dedicated machine to keep track of freight movements (location, loads, and status) on my model railroad. I do have plans to write code to allow the computer to handle many of the mundane electrical tasks on a railroad, but since many friends would like such code, that will be done on the PC.

However, while sitting at work, eagerly awaiting the arrival of my new machine, I received a fax from my brother concerning a new flight simulator coming out for the PC that models aircraft and terrain to a level never before seen. However, the processing requirements for this is enormous, and the company projects that they will have to wait for 150hz chips (almost double my speed). So I was at the cutting edge of technology for about 15 minutes. Oh well.....

(Editor's Note: Robert Raymond is a gifted and prolific writer and talented in several areas and his contributions are most welcomed by the staff of this Newsletter. However, the opinions expressed in the month's Keyissues are his own and do not reflect the opinions of the Newsletter, the Newsletter Staff or the official opinion of the Mid-Florida Atari Computer Club or the Officers of the MFACC. Mr. Raymond is the secretary of the Club, but his opinions are entirely his own. The Newsletter staff does not edit any article for content, and will publish all opposing or alternative views.)

ATARI 8-BIT DISK OF THE MONTH

by Jeff Potter
MFACC 8-Bit Librarian

Welcome to March, faithful 8-bitters. On a request from one of you I have searched the disk library, and my own, and come up with the best slide show programs. These are a step above the generic "show every .PIC file on the disk" that comes with your average disk full of Koala pictures.

On the first side is the B&G Slide Show (as AUTORUN.SYS), and MIPSLIDE. These run without BASIC. I'm including a portion of the .DOC file of B&G Slide here (what a quick way to fill up space in the DOM column!).

****

THE B&G SLIDE SHOW

Copyright (c) 1988
Bradford Mott

The B&G Slide Show has various uses. You can use it to title video tapes, or you can create animations. The B&G Slide Show can produce slide shows using graphics 8, graphics 9, Koala pad pictures, and 62 sector graphics 7 1/2 pictures. The slide show program is controlled using a control file on disk called "SLIDE.CTL". This file contains all of the commands that the slide show is to perform. The file can be made using almost any text editor. The commands below may be mixed to make different effects. You must use a period before all commands or they will be ignored by the slide show. The command must also be the first thing on the line. There can only be one command per line, and there must be a return at the end of each line. The commands can be in lower or upper case.

An example of a "SLIDE.CTL" is:

Commmand	Comments
.load d1:picture.pic	Load in first picture.
.drop	Drop pic on the screen .
.load d1:picture2.pic	Load in next picture.
.dissolve	Dissolve pic on the screen.
.roll	Roll the picture.
.fold	Fold the picture.
.unfold	Unfold the picture.
.again	Start the show again.

COMMAND SUMMARY

Load Commands

LOAD filename.PIX
LOAD filename.PIC
LOAD filename.GR9
LOAD filename.GR8

Program flow commands

STOP
WAIT
PAUSE n
AGAIN

Canvas Setup Commands

FOLD
UNFOLD
ROLL
DOUBLE
FLIP
MAG TOP
MAG BOT
MIR TOP
MIR BOT
RESTORE DL

Canvas Paint Commmands

HSTRIPS
VSTRIPS
LEFT
RIGHT
FADE
DROP
CURTAIN
GROW
DIAGONAL
RAISE
LOWER
DISSOLVE
RESTORE SC

Misc. Commands

RAINBOWA n
RAINBOWB n
DSOUND ON
DSOUND OFF
CLEAR SCR
CLEAR BACK
SCREEN ON
SCREEN OFF
SHAKE
BEEP
SPEED n
RESTORE ALL

****

A default SLIDE.CTL (not the one listed above) was included, as well as some .PIC files, to demonstrate BGSLIDE.

The second program on side one of the disk is MIPSLIDE. This is a quicker, easier to use slide show that doesn't have quite the power of BGSLIDE. Basically, when you load MIPSLIDE, it gives you a menu from which you can start a new show, receive a help screen, or exit the program. Be sure to read the help screen at least the first time. When you select "start a new show" it reads the directory of your default disk (usually D1:) and displays all files with a .PIC extender (assuming they were created with the Koala Pad/Atari Touch Tablet). It can read up to 26 entries from the directory. It assigns each of them a letter of the alphabet. At this point, if you just want to view all the files, press RETURN. But if you want to change the order they are shown, the type of transition between files, or the delay between files, you can do that by pressing SPACE. You can then modify those parameters, and press RETURN to view your pre-programmed show. I found the B&G Slideshow the more flexible, but you have to use a text or program editor to get the full effect. MIPSLIDE has more "graceful" wipes and fades between different pictures, as it attempts to mask the effects of changing the color registers as it transitions.

One side two of the disk I've included a program I had something to do with. CSVIEW, by Clay Halliwell (you'll remember he also did FlickerTerm 80) is a slideshow program for Colrview Squash(ed) picture files. You create these files from .GIF pictures using my JVIEW program. These pictures can display 320 x 192 x 8 colors, 160 x 192 x 64 colors, or a whopping 80 x 192 x 4096 colors.

Clay has done a good job of programming here, and the program runs fast under BASIC because the main routines are in machine language. From the main screen you can select the order of pictures, or change the amount of delay between pictures. There's no fancy wipes or dissolves here, since the Colrview technique eats up all the processor time while a picture is being displayed. I've included the .DOC file, and some of my favorite .RGB files on side two also. That's all I've got this month. As always, I'm open for suggestions on future themes for 8-bit DOMs. Drop me a line on Bob's Inner Core BBS, or write me at: 202 Chestnut Ridge St., Winter Springs, FL 32708

1050 DISK DRIVE FIX

by Willie Pelzer

This text file will (hopefully) tell to how to fix your 1050 drive ONLY if the following conditions are true.

#1 The drive reads disc files okay.

#2 The speed of the drive is correct. Their are Utilities in DL3 that you may use to check the speed. Just BRO/KEY SPEED.

#3 The drive refuses to format when given the command and either formats the first two tracks or none at all and then just spins. Sometimes it will return an error #139.

#4 It refuses to write and when given the command,just gives an error# 139.

These are the problems that I had with my US doubler 1050. If you have the same EXACT problem, this fix MAY work for you also. CAUTION! If you are not handy with drive internals, or do not want to take responsibility for trying this,then send the thing to ICD for repair (or any drive repair service). Why am I being so cautious? Because while this fix DID cure my drive, I wanted to let you know that I can't say what it may do to yours. Still game? Okay,here we go.

You will need a pair of needle nosed pliers, a phillips screwdriver, and a switch (I used a cheap Radio Shack pushbutton, less than $3.00). Also, about 10 inches of wire. I used a piece of small gauge speaker wire. And a low wattage soldering iron (25 watts will do).

First, unplug your drive and turn your drive over and unscrew the four recessed screws that hold the top down. You should'nt have to remove the front two that hold on the face plate. Now turn the drive right side up. Lifting from the rear, remove the top. Be VERY careful not to disturb anything! On the left rear of the printed circuit there are four brown plugs that are marked (on the board) from front to rear as J11, J12, J1, J10 and J14. The one we want is J11, the closest one to the drive motor. Take a magic marker and mark the front of the plug, this will make it easy to know which side is the front. The two wires we want are the north pair of the four (when you're in front of the drive). In other words, of the four wires in plug J11, we want the first two, closest to the drive motor. Once it's marked, CAREFULLY remove the plug with a pair of needle nosed pliers.

Carefully remove the some of the insulation from our two target wires. Take a small piece of wire and connect the two wires together. Tape them to prevent a them from shorting out against antthing. This is only temporary, as first we will test the fix to see if it works.

Replace J11 (using the magic marker mark as thefront) and without replaceing the top, plug up your drive as usual. Load your dos. Using a blank disc, attempt to format. IF when the first two wires of J11 are connected together, the drive formats and writes then we are on the way! If the drive still refuses to format or write, then undo the jumper that you made on J11, tape the two bare spots on the two wires and replace J11.

Replace the cover and send the drive out to be fixed. If the drive now formats and writes, then on we go!

Unplug the drive and go back to J11. If everything is working now, we have to wire up a switch because connecting the two wires of J11 together over rides the write protect of the drive. You can now write to ANY disc, whether it has a notch, write protect tab, or no notch at all. So, we have to put in a switch so that we can go from the old NO format, no write condition to ALL format, all write condition.

Remember those extra write protect tabs that you had? Put them on ALL your discs! Just in case the sensor starts working again and formats or writes when you least expect it. All you people that use both sides of a disc (a bad practice I'M told), will now be able to format or write to side two without making a notch. On to the finish...

Remove J11 again and remove the jumper wire that connected the first two wires. What we want to do is solder a length of wire to each of the two wires (the bared portions). Once you've done this, tape each wire well and replace J11 on the board. (use your mark for front!). Each wire should now be separate with a length of wire coming from it.

Now solder a wire to each of the two terminals of your switch. (first decide where you're going to mount it, I mounted my pushbutton on the lower sloping portion of the face plate). Without replacing the cover, plug your drive in and test it once again for format and write. If it does'nt write or format the first time then push the switch to the other position. It should now work. If it worked the first time, it should work now. If not, go over your work. Maybe you did'nt make one of the connections properly.

If using a pushbutton switch, in should allow the drive to function as it should and out should restore it to it's former no write condition.

Now mount your switch, (keep the wires away from the drive mech.) and replace your cover. As to WHY this works or what happened to break your drive in the first place, well sorry I don't know. I do know that it worked for me and I'm hopeful that this $3.00 fix works for you.

Wpiii
Willie Pelzer 3rd ppn# 73247,206

XE CONSOLE KEY FIX...
... that really works.

I found that I was not alone when I started having trouble getting my console keys to work on the ATARI 130XE the CHAOS club used for its BBS. It seems that very many of the machines develop this problem. I asked around and found several others that had done as I did, opened the keyboard and cleaned the button contacts, only to get good results for a week or so before losing them again.

I then received a couple reprints of articles suggesting hardware fixes. I tried a couple that did not work, but one that worked the best came from Alan Haskell (printed in the SBACE GAZETTE, April/May '86). Heres how, with a small modification to save you the trouble I made for myself trying his recommended installation.

You will need a small phillips head screwdriver, needle nose pliers, a small soldering iron, and three 3k (3,000 ohm) resistors. Quarter-watt rating is plenty, in fact, the smaller the resistors are physically, the better.

1. Turn over the XE computer and remove the 4 screwss that hold it together. Turn the computer over again and remove the top half of the case.

2. Lift out the keyboard and gently pull the ribbon out of its connector. DO NOT OPEN THE KEYBOARD as cleaning internally will not help, and you may damage the carbon tracks on the baking sheet inside.

3. Remove the motherboard from the lower half of the case by removing the phillips screws holding it down.

4. Remove the top and bottom metal sheilds from the board by carefully straghtening the bent tabs that go through the board.

5. Observe the top and underside of the connector you pulled the keyboard ribbon out of. As seen from the top as you would look at the computer normally, there are 24 connections, with connection #1 at the left and #24 at the right. Connection #3 (from the left) is the ground connection. The last 4, #21, #22, #23, #24 are the START, SELECT, OPTION, and RESET connections. When a connection is made from these points to the ground, the computer will know one or several of the keys are being pushed. Due to a design problem, the console keys have a bit too much resistance to always register even when you really lean on them. So, we will install the three resitors between the connections and ground so as to "leak" a bit more ground signal to the computer. That way, not nearly so good a connection is required by the actual keys when pressed.

6. Identify the proper pins on the bottom side of the circuit board. We will install the resitors under the board.

7. Solder one end of all three resitors together. Then connect this common end to the ground connection (pin 3). Then solder the free end of the resiters, one each, to pins 21, 22, and 23. (The reset system never seems affected, nor any other keys.)

8. Be certain that the wires on the resistors do not touch each other nor any other circuitry! Use as little solder and as short a heating time as possible. Tape the resitors to prevent shorting if

needed, and press them close to the circuitboard.

9. Reassemble the shields to the board, bending back the tabs to hold it all together. Look inside to be sure the resitors do not touch the lower shield.

10. Complete the re-assembly, taking extra care not to stress or insert the keyboard ribbon too many times. The spring contacts bend easily, and the conductive coating on the ribbon, if scratched through, will cause the keyboard to be useless. Don't worry too much, thats hard to do if you are careful. (The original mod suggested pressing the resistor leads into the connector so as to make it solder-free and simpler.... but that "simplicity" ruined my connector and made hour more work! Solder it!)

11. Test the repair. Power up the machine and type in this one line basic program:

```
10 PRINT PEEK(53279):GOTO 10
```

Then type RUN. You will see a row of 7's down your screen. Push OPTION. They should turn to 3's. SELECT will give you 5's, and starts will give you 6's. Combinations will give other numbers from) to 7. If each key responds, you have finished the repair.

This has permanently fixed the problem on dozens of XE's. It has restored my keys to "feather touch" after a long siege of having to boot 5 or 6 times mashing the OPTION key trying to get a boot without BASIC. It WILL work for you.

John Nagy, SYSOP of the CHAOS BBS
(517) 371-1106